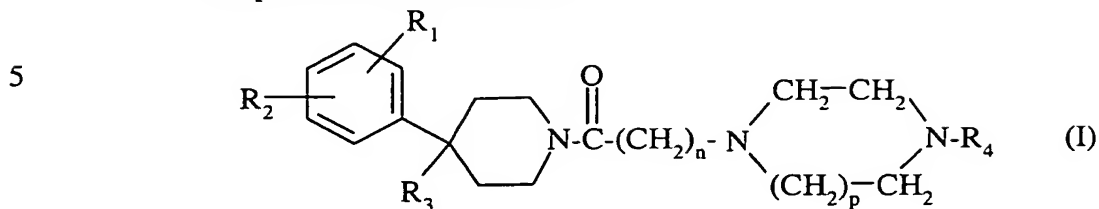


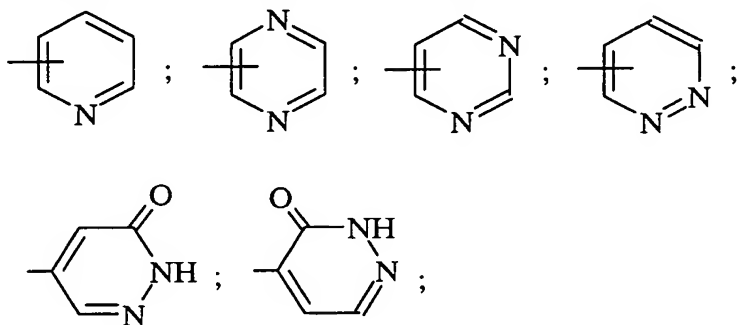
## CLAIMS

1. Compound of the formula (I):



in which:

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- n is 1 or 2;
  - p is 1 or 2;
  - R<sub>1</sub> represents a halogen atom; a trifluoromethyl radical; a (C<sub>1</sub>-C<sub>4</sub>)alkyl; a (C<sub>1</sub>-C<sub>4</sub>)alkoxy; a trifluoromethoxy radical;
  - R<sub>2</sub> represents a hydrogen atom or a halogen atom;
  - 15 - R<sub>3</sub> represents a hydrogen atom; a group -OR<sub>5</sub>; a group -CH<sub>2</sub>OR<sub>5</sub>; a group -NR<sub>6</sub>R<sub>7</sub>; a group -NR<sub>8</sub>COR<sub>9</sub>; a group -NR<sub>8</sub>CONR<sub>10</sub>R<sub>11</sub>; a group -CH<sub>2</sub>NR<sub>12</sub>R<sub>13</sub>; a group -CH<sub>2</sub>NR<sub>8</sub>CONR<sub>14</sub>R<sub>15</sub>; a (C<sub>1</sub>-C<sub>4</sub>)alkoxycarbonyl; a group -CONR<sub>16</sub>R<sub>17</sub>;
  - or else R<sub>3</sub> constitutes a double bond between the carbon atom to which it is attached and the adjacent carbon atom of the piperidine ring;
  - 20 - R<sub>4</sub> represents an aromatic group selected from:



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- the said aromatic groups being unsubstituted or being mono- or disubstituted by a substituent selected independently from a halogen atom; a (C<sub>1</sub>-C<sub>4</sub>)alkyl; a (C<sub>1</sub>-C<sub>4</sub>)alkoxy; a trifluoromethyl radical;
  - R<sub>5</sub> represents a hydrogen atom; a (C<sub>1</sub>-C<sub>4</sub>)alkyl; a (C<sub>1</sub>-C<sub>4</sub>)alkylcarbonyl;
  - R<sub>6</sub> and R<sub>7</sub> represent each independently a hydrogen atom or a (C<sub>1</sub>-C<sub>4</sub>)alkyl;
  - 35 - R<sub>8</sub> represents a hydrogen atom or a (C<sub>1</sub>-C<sub>4</sub>)alkyl;
  - R<sub>9</sub> represents a (C<sub>1</sub>-C<sub>4</sub>)alkyl or a group -(CH<sub>2</sub>)<sub>m</sub>-NR<sub>6</sub>R<sub>7</sub>;

- m is 1, 2 or 3;
- R<sub>10</sub> and R<sub>11</sub> represent each independently a hydrogen atom or a (C<sub>1</sub>-C<sub>4</sub>)alkyl;
- R<sub>12</sub> and R<sub>13</sub> represent each independently a hydrogen atom or a (C<sub>1</sub>-C<sub>5</sub>)alkyl;
- R<sub>13</sub> may also represent a group -(CH<sub>2</sub>)<sub>q</sub>-OH or a group -(CH<sub>2</sub>)<sub>q</sub>-S-CH<sub>3</sub>;
- 5     - or else R<sub>12</sub> and R<sub>13</sub>, together with the nitrogen atom to which they are attached, constitute a heterocycle selected from aziridine, azetidine, pyrrolidine, piperidine and morpholine;
- q is 2 or 3;
- R<sub>14</sub> and R<sub>15</sub> represent each independently a hydrogen atom or a (C<sub>1</sub>-C<sub>4</sub>)alkyl;
- 10    - R<sub>16</sub> and R<sub>17</sub> represent each independently a hydrogen atom or a (C<sub>1</sub>-C<sub>4</sub>)alkyl;
- R<sub>17</sub> may also represent a group -(CH<sub>2</sub>)<sub>q</sub>-NR<sub>6</sub>R<sub>7</sub>;
- or else R<sub>16</sub> and R<sub>17</sub>, together with the nitrogen atom to which they are attached, constitute a heterocycle selected from azetidine, pyrrolidine, piperidine, morpholine and piperazine which is unsubstituted or substituted in position 4 by a
- 15    (C<sub>1</sub>-C<sub>4</sub>)alkyl;
- in the form of a base or an addition salt with an acid, or in the form of a hydrate or solvate.
- 2. Compound of formula (I) according to Claim 1, characterized in that:
  - R<sub>1</sub> is in position 2, 3 or 4 of the phenyl and represents a trifluoromethyl radical,
  - 20    a chlorine atom, a methyl, a methoxy or a trifluoromethoxy radical and R<sub>2</sub> represents a hydrogen atom; or else R<sub>1</sub> is in position 3 of the phenyl and represents a trifluoromethyl radical and R<sub>2</sub> is in position 4 of the phenyl and represents a chlorine atom;
  - in the form of a base or an addition salt with an acid, or in the form of a hydrate or solvate.
  - 25    or solvate.
- 3. Compound of formula (I) according to Claim 1, characterized in that:
  - R<sub>3</sub> represents a hydrogen atom, a hydroxyl, a methoxy, an (acetyloxy)methyl, a hydroxymethyl, a dimethylamino, an acetylamino, an aminomethyl, a
  - (methylamino)methyl, a (dimethylamino)methyl, a (diethylamino)methyl, an
  - 30    (isopropylamino)methyl, an (N-methylisopropylamino)methyl, an (isobutylamino)methyl; an (N-methylisobutylamino)methyl, an (isopentylamino)methyl, an (N-methylisopentylamino)methyl, an aminocarbonyl, an azetidin-1-ylcarbonyl; or else R<sub>3</sub> constitutes a double bond between the carbon atom to which it is attached and the adjacent carbon atom of the piperidine ring;
  - 35    in the form of a base or an addition salt with an acid, or in the form of a hydrate or solvate.

4. Compound of formula (I) according to Claim 1, characterized in that:
  - R<sub>4</sub> represents a 2-pyridyl, a 6-methyl-2-pyridyl, a 3-(trifluoromethyl)-2-pyridyl, a 5-(trifluoromethyl)-2-pyridyl, a 3-chloro-5-(trifluoromethyl)-2-pyridyl, a 3-pyridyl, a 4-pyridyl, a 3,5-dichloro-4-pyridyl, a 2-pyrazinyl, a 5-chloro-2-pyrazinyl, a 6-chloro-2-pyrazinyl, a 2-pyrimidinyl, a 4-(trifluoromethyl)-2-pyrimidinyl, a 6-chloro-2-pyrimidinyl, a 4-pyrimidinyl, a 6-chloro-4-pyrimidinyl, a 5-pyrimidinyl, a 3-pyridazinyl, a 6-chloro-3-pyridazinyl, a 4-pyridazinyl, a 3(2*H*)-pyridazinone-5-yl or a 3(2*H*)-pyridazinone-4-yl;
  - in the form of a base or an addition salt with an acid, or in the form of a hydrate or solvate.
5. Compound of formula (I) according to Claim 1, characterized in that:
  - n is 1 or 2;
  - p is 1 or 2;
  - R<sub>1</sub> is in position 2, 3 or 4 of the phenyl and represents a trifluoromethyl radical, a chlorine atom, a methyl, a methoxy or a trifluoromethoxy radical and R<sub>2</sub> represents a hydrogen atom; or else R<sub>1</sub> is in position 3 of the phenyl and represents a trifluoromethyl radical and R<sub>2</sub> is in position 4 of the phenyl and represents a chlorine atom;
  - R<sub>3</sub> represents a hydrogen atom, a hydroxyl, a methoxy, an (acetyloxy)methyl, a hydroxymethyl, a dimethylamino, an acetylamino, an aminomethyl, a (methylamino)methyl, a (dimethylamino)methyl, a (diethylamino)methyl, an (isopropylamino)methyl, an (N-methylisopropylamino)methyl; an (isobutylamino)methyl; an (N-methylisobutylamino)methyl, an (isopentylamino)methyl, an (N-methylisopentylamino)methyl, an aminocarbonyl, an azetidin-1-ylcarbonyl; or else R<sub>3</sub> constitutes a double bond between the carbon atom to which it is attached and the adjacent carbon atom of the piperidine ring;
  - R<sub>4</sub> represents a 2-pyridyl, a 6-methyl-2-pyridyl, a 3-(trifluoromethyl)-2-pyridyl, a 5-(trifluoromethyl)-2-pyridyl, a 3-chloro-5-(trifluoromethyl)-2-pyridyl, a 3-pyridyl, a 4-pyridyl, a 3,5-dichloro-4-pyridyl, a 2-pyrazinyl, a 5-chloro-2-pyrazinyl, a 6-chloro-2-pyrazinyl, a 2-pyrimidinyl, a 4-(trifluoromethyl)-2-pyrimidinyl, a 6-chloro-2-pyrimidinyl, a 4-pyrimidinyl, a 6-chloro-4-pyrimidinyl, a 5-pyrimidinyl, a 3-pyridazinyl, a 6-chloro-3-pyridazinyl, a 4-pyridazinyl, a 3(2*H*)-pyridazinone-5-yl, a 3(2*H*)-pyridazinone-4-yl;
  - in the form of a base or an addition salt with an acid, or in the form of a hydrate or solvate.
6. Compound of formula (I) according to Claim 1, characterized in that:

- n is 1;

- p is 1;

- R<sub>1</sub> is in position 2, 3 or 4 of the phenyl and represents a trifluoromethyl radical, a chlorine atom, a methoxy or a trifluoromethoxy radical and R<sub>2</sub> represents a hydrogen atom; or else R<sub>1</sub> is in position 3 of the phenyl and represents a trifluoromethyl radical and R<sub>2</sub> is in position 4 of the phenyl and represents a chlorine atom;

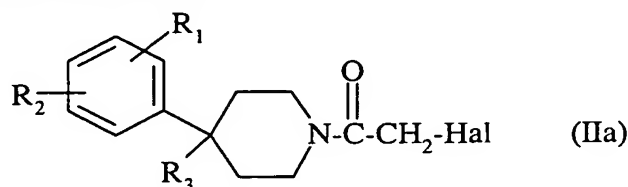
- R<sub>3</sub> represents a hydroxyl, a dimethylamino, an aminomethyl, a (methylamino)methyl, a (dimethylamino)methyl, a (diethylamino)methyl, an (isopropylamino)methyl, an (isobutylamino)methyl, an (isopentylamino)methyl, an (N-methylisopentylamino)methyl or an aminocarbonyl; or else R<sub>3</sub> constitutes a double bond between the carbon atom to which it is attached and the adjacent carbon atom of the piperidine ring;

- R<sub>4</sub> represents a 2-pyrazinyl, a 4-pyrimidinyl, a 3(2H)-pyridazinone-5-yl or a 5-(trifluoromethyl)-2-pyridyl;

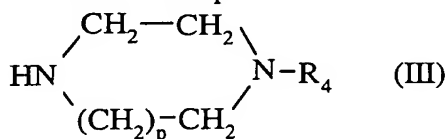
in the form of a base or an addition salt with an acid, or in the form of a hydrate or solvate.

7. Process for preparing compounds of formula (I) according to Claim 1 in which n = 1, characterized in that:

a1) a compound of formula



in which R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are as defined for a compound of formula (I) in Claim 1 and Hal represents a halogen atom, preferably chlorine or bromine, with the proviso that when R<sub>3</sub> contains a hydroxyl or amine function these functions may be protected, is reacted with a compound of formula

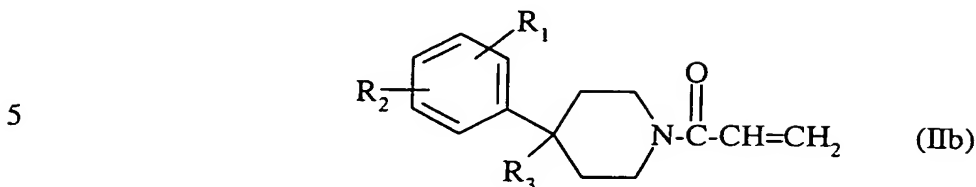


in which p and R<sub>4</sub> are as defined for a compound of formula (I) in Claim 1;

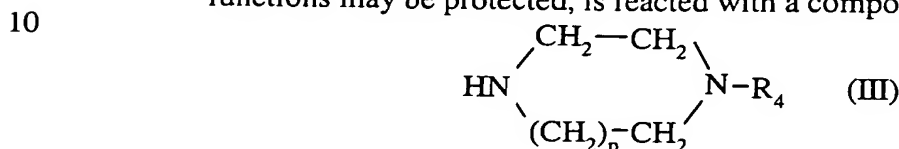
b1) and, after deprotection of the hydroxyl or amine functions present in R<sub>3</sub> where appropriate, the compound of formula (I) is obtained.

8. Process for preparing compounds of formula (I) according to Claim 1 in which n = 2, characterized in that:

a2) a compound of formula



in which  $R_1$ ,  $R_2$  and  $R_3$  are as defined for a compound of formula (I) in Claim 1, with the proviso that when  $R_3$  contains a hydroxyl or amine function these functions may be protected, is reacted with a compound of formula

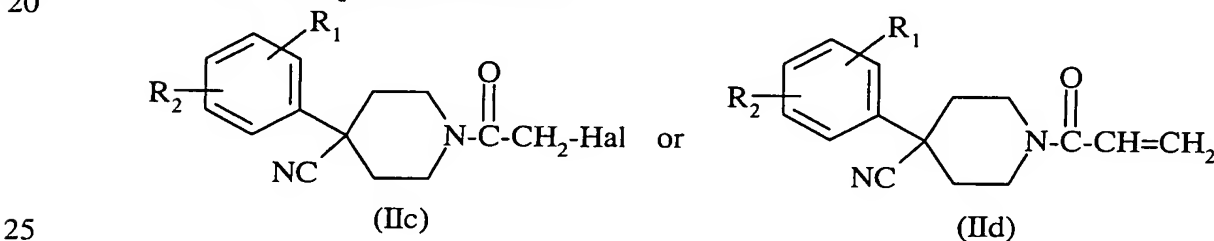


in which  $p$  and  $R_4$  are as defined for a compound of formula (I) in Claim 1;

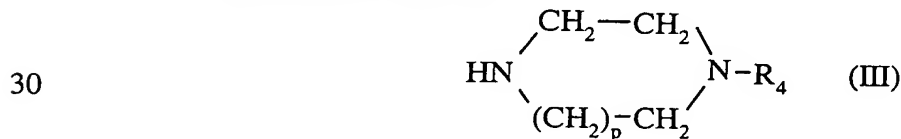
15 b2) and, after deprotection of the hydroxyl or amine functions present in  $R_3$  where appropriate, the compound of formula (I) is obtained.

9. Process for preparing compounds of formula (I) according to Claim 1 in which  $R_3$  represents a group  $-\text{CH}_2\text{NR}_{12}\text{R}_{13}$  in which  $R_{12}$  and  $R_{13}$  each represent hydrogen, characterized in that:

20 a3) a compound of formula



in which  $R_1$  and  $R_2$  are as defined for a compound of formula (I) in Claim 1 and Hal represents a halogen atom, preferably chlorine or bromine, is reacted with a compound of formula



in which  $p$  and  $R_4$  are as defined for a compound of formula (I) in Claim 1 to give a compound of formula

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10. Compound of formula



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in the form of a base or an addition salt with an acid, or in the form of a hydrate or solvate.

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13. Use of a compound of formula (I) according to any one of Claims 1 to 6 for the preparation of a medicament intended for the prevention or treatment of central or peripheral neurodegenerative diseases; amyotrophic lateral sclerosis, multiple sclerosis; cardiovascular conditions; peripheral neuropathies; damage to the optic nerve and to the retina; spinal cord trauma and cranial trauma; atherosclerosis; stenoses; cicatrization; alopecia; cancers; tumours; metastases; leukaemias; chronic neuropathic and inflammatory pain; autoimmune diseases; bone fractures; bone diseases.

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